

What is Claimed is:

1. A refrigerator comprising:
 - a freezing chamber;
 - a refrigerating chamber at a side of the freezing chamber;
 - 5 a barrier between the freezing chamber and the refrigerating chamber, the barrier having a freezing chamber cold air passage formed therein;
 - a partition plate for compartmentalizing a freezing chamber cold air passage in rear of the freezing chamber where an evaporator is positioned;
 - the evaporator provided in a “—” form along the freezing chamber cold air
 - 10 passage and the refrigerating chamber cold air passage;
 - a partition wall between the freezing chamber cold air passage and the refrigerating chamber cold air passage; and
 - a fan mounted over the freezing chamber cold air passage and the refrigerating chamber cold air passage for discharging cold air flowing through respective cold air
 - 15 passages to the freezing chamber and the refrigerating chamber, respectively.

2. The refrigerator as claimed in claim 1, wherein the evaporator includes a first part exposed to the freezing chamber cold air passage, and a second part exposed to the refrigerating chamber cold air passage.

20

3. The refrigerator as claimed in claim 2, wherein the first part is larger than the second part.

4. The refrigerator as claimed in claim 2, wherein an outer surface of the first
- 25 part and the second part is separated by the partition wall for preventing the cold air

-19-

flowing through respective parts from mixing with each other.

5 5. The refrigerator as claimed in claim 1, wherein the partition plate includes a front plate and a rear plate, to form a cold air passage between the plates.

 6. The refrigerator as claimed in claim 5, wherein the front plate has a plurality of cold air discharge openings formed therein.

 7. The refrigerator as claimed in claim 5, wherein the rear plate has an opening
10 in an upper part thereof, and the fan is provided adjacent to the opening.

 8. The refrigerator as claimed in claim 5, wherein the partition plate has openings in a lower part thereof to form cold air suction openings.

15 9. The refrigerator as claimed in claim 1, wherein the fan is a cross flow fan.

 10. The refrigerator as claimed in claim 9, wherein the cross flow fan has one side exposed to the freezing chamber cold air passage, and the other side exposed to the refrigerating chamber cold air passage.

20 11. The refrigerator as claimed in claim 9, wherein the first part is separated from the second part by a separation plate.

 12. The refrigerator as claimed in claim 9, wherein the refrigerating chamber
25 cold air passage has a cold air discharge opening above a part adjacent to the cross flow

-20-

fan.

13. The refrigerator as claimed in claim 12, wherein the cold air discharge opening has a damper provided thereto for opening/closing the cold air discharge opening.

10

14. The refrigerator as claimed in claim 1, wherein the barrier has cold air suction openings in a lower part of a refrigerating chamber side thereof in communication with the refrigerating chamber cold air passage.

10

15. The refrigerator as claimed in claim 1, wherein the evaporator is an one layered fin-tube type heat exchanger.

15

16. A refrigerator comprising:

a freezing chamber;

a refrigerating chamber at a side of the freezing chamber;

a barrier between the freezing chamber and the refrigerating chamber, the barrier having a freezing chamber cold air passage formed therein;

20

a partition plate for compartmentalizing a freezing chamber cold air passage in rear of the freezing chamber where an evaporator is positioned;

the evaporator provided in a "U" form along the freezing chamber cold air passage and the refrigerating chamber cold air passage;

a partition wall between the freezing chamber cold air passage and the refrigerating chamber cold air passage; and

25

fans respectively provided to the freezing chamber cold air passage and the

-21-

refrigerating chamber cold air passage for forced circulation of cold air to the freezing chamber and the refrigerating chamber, respectively.

17. The refrigerator as claimed in claim 16, wherein the freezing chamber cold
5 air passage and the refrigerating chamber cold air passage are in communication with each other at one sides thereof, and a damper is provided in a part of the communication is made.

18. The refrigerator as claimed in claim 16, wherein the evaporator includes a
10 first part exposed to the freezing chamber cold air passage, and a second part exposed to the refrigerating chamber cold air passage.

19. The refrigerator as claimed in claim 18, wherein the first part is larger than
the second part.

20. The refrigerator as claimed in claim 18, wherein the first part and the second
part are separated by the partition wall for preventing the cold air flowing through
respective parts from mixing with each other.

21. The refrigerator as claimed in claim 16, wherein the partition plate includes
20 a front plate and a rear plate, to form a cold air passage between the plates.

22. The refrigerator as claimed in claim 21, wherein the front plate has a
plurality of cold air discharge openings formed therein.

-22-

23. The refrigerator as claimed in claim 21, wherein the rear plate has an opening in an upper part thereof, and the fan is provided adjacent to the opening.

24. The refrigerator as claimed in claim 21, wherein the partition plate has
5 openings in a lower part thereof to form cold air suction openings.

25. The refrigerator as claimed in claim 1, wherein the fan in the freezing chamber cold air passage is an axial flow fan, and the fan in the refrigerating chamber cold air passage is a cross flow fan.

10

26. The refrigerator as claimed in claim 25, wherein the refrigerating chamber cold air passage has a cold air discharge opening in a part adjacent to the cross flow fan.

27. The refrigerator as claimed in claim 26, wherein the cold air discharge
15 opening has a damper provided thereto for opening/closing the cold air discharge opening.

28. The refrigerator as claimed in claim 16, wherein the barrier has cold air suction openings in a lower part of a refrigerating chamber side thereof in
20 communication with the refrigerating chamber cold air passage.

29. The refrigerator as claimed in claim 16, wherein the evaporator is an one layered fin-tube type heat exchanger.